

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP COMMITTEE
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

Game Branch / HPC Project Number:	12-309
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PROJECT INFORMATION

Project Title: Yavapai Ranch Drinker Project

Region and Game Management Unit: Region III/Unit 17A

Local Habitat Partnership Committee (LHPC):
 • Prescott

Was the project presented to the LHPC?
YES ☐ **NOX**

Has this project been submitted in previous years? **YES** ☐ **NOX**

If Yes, was it funded? **YES** ☐ **NO** ☐ → **HPC Project #:**

Project Type: Addition of Wildlife Drinker to Existing Pipeline/Storage System

Brief Project Summary: Many areas within Game Management Unit 17A lack perennial water sources and receive limited wildlife use as a result. This project will tap into an existing water pipeline and storage system and install five wildlife only drinkers that will be functional year around. Department Development Branch personnel will complete the construction/installation.

Big Game Wildlife Species to Benefit: Antelope, mule deer, elk, javelina

Implementation Schedule (Month/Day/Year):

Project Start Date: Spring 2013 (weather dependant)

Project End Date: Summer 2014 (weather dependant)

Environmental Compliance:

NEPA Completed: **YES** ☐ **No** ☐ **N/AX**

Projected Completion Date: _____

State Historic Preservation Office - Archaeological Clearance:

YES ☐ **No** ☐ **N/AX**

Projected Completion Date: _____

Arizona Game and Fish Department EA Checklist: **N/AX**

To be Completed by: _____

Projected Completion Date: _____

PROJECT FUNDING

Special Big Game License Tag Funds Requested: \$ 26,000

Cost Share or Matching Funds: \$ 31,600

Total Project Costs: \$ **57,600**

PARTICIPANT INFORMATION

Applicant (please print):
 Darren G. Tucker, Wildlife
 Manager III, Prescott

Address: Arizona Game and Fish
 Dept., Region III
 5325 N. Stockton Hill Rd.
 Kingman, AZ 86401

E-mail:
 DTucker@azgfd.gov

Telephone: 928-856-0665

Date: August 31, 2012

AGFD Contact and Phone No. (If applicant is not AGFD personnel):

Project has been coordinated with:

Fred Ruskin (owner) and James Linson (manager) Yavapai Ranch; Joe Currie and Ed Jahrke, AGFD Development Branch.

NEED STATEMENT – PROBLEM ANALYSIS:

In Arizona, dry conditions and lack of available water often poses a significant bottleneck for big game and other wildlife species by making large blocks of habitat mostly unusable. For nearly two decades Arizona has experienced a period of drought conditions with several consecutive years that were the driest on record. Compounding the problems from lack of adequate permanent water is the stress put on habitat surrounding the remaining available water sources. Vegetation in these areas can become degraded from use by concentrated wildlife. If repeated over a broad area, these circumstances may contribute to low survival of juveniles and to adult animals being in poor condition entering the breeding season, ultimately resulting in low recruitment rates for these populations.

Northwestern Unit 17A offers significant hunting opportunity for pronghorn antelope, mule deer and elk. Much of this area provides high quality habitat for these animals except that it frequently lacks consistent water availability. Over the years, the Yavapai Ranch has constructed an extensive system of water pipeline, storage tanks and drinkers throughout this area for its livestock. Wildlife, of course, use these waters when available. However, as part of their livestock management efforts, the Ranch typically turns these waters off when cattle are not in the pasture. As a result, wildlife cannot count on these waters on a consistent basis and may be forced to move elsewhere into lower quality habitat and often, as is the case with antelope, at an increased risk of predation.

This project proposes to install five wildlife only drinkers at locations with existing storage tanks along the water pipeline. Using a self-contained float system, each drinker will provide a permanent water source. Additionally, standard livestock exclusion fencing will be constructed around the drinkers to prevent cattle from using the waters and not interfere with livestock operations.

Of the five drinkers, two will be primarily used by antelope with some mule deer and elk use. Two will be split evenly by the three species and one will be strictly mule deer and elk. For antelope in particular, these water sources will allow them to make much better use of the best habitat during the fawning period. The past several years have seen this area with little to no available water within several miles.

PROJECT OBJECTIVES:

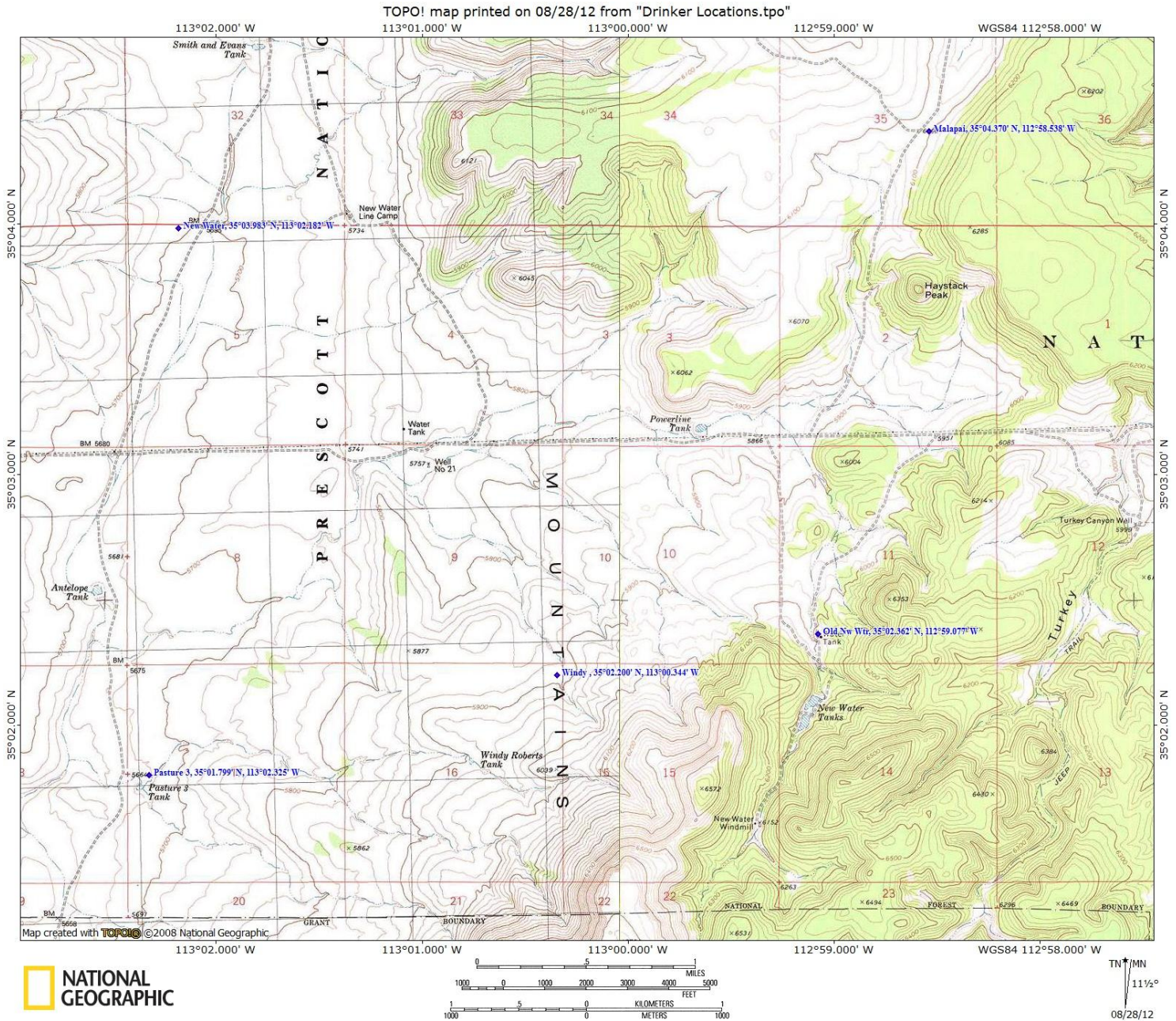
- Provide reliable permanent water sources for wildlife.
- Reduce concentrations of wildlife around the current permanent waters, which can lead to habitat degradation and increased fawn predation.
- Increase antelope fawn survival.

PROJECT DESCRIPTION AND STRATEGIES:

- Coordinate with Yavapai Ranch owner and manager
- Develop construction plan
- Install five wildlife drinkers along existing water pipeline/storage system.

PROJECT LOCATION:

Drinker Name	GMU	Land Status	Location (NAD 83) With Elevation	UTM
MALAPAI	17A	PRIVATE	35 4.371, 112 58.537 6,109	319868mE 3882905mN
OLD NEW WATER	17A	PRIVATE	35 2.361, 112 59.077 6,023	318975mE 3879209mN
NEW WATER	17A	PRIVATE	35 3.982, 113 2.182 5,713	314315mE 3882301mN
PASTURE 3	17A	PRIVATE	35 1.799, 113 2.326 5,689	314015mE 3878268mN
WINDY ROBERTS	17A	PRIVATE	35 2.199, 113 0.345 5,899	317042mE 3878948mN



LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name): Private property owned by Yavapai Ranch (Owner - Fred Ruskin).

IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP or LANDOWNER AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?

YES[] NOX: However, Mr. Ruskin has verbally agreed to enter into an agreement allowing the Department to conduct this work.

HABITAT DESCRIPTION:

The project area is located in the southwestern quadrant of the Yavapai Ranch. Elevations range from approximately 5,700 to 6,100 feet above sea level. The area is composed of a mix of great basin grassland dominated by grama grasses and pinyon-juniper interspersed with cliffrose and other browse species. The only structure located in this area is the Ranch's west side headquarters. Landforms include flat open plains, rolling hills and small plateaus.

ITEMIZED USE OF FUNDS:

Capturing the "match" value of the pre-existing water pipeline and storage system is a difficult task. Undoubtedly this infrastructure has great value, as does the water that will be supplied to the wildlife drinkers and consumed by wildlife. The current price tag for a standard wildlife water catchment (materials and construction) is roughly \$50,000. Multiplied by five locations, it would cost an estimated \$250,000 to provide permanent waters in the proposed locations without the benefit of the pipeline. However, it is unrealistic to suggest this type of construction.

A more reasonable estimate is the cost to the Yavapai Ranch to maintain the water delivery system per day on an annual basis. Only a portion of the estimated daily cost will be used since wildlife will use only a portion of the water provided. This annual cost multiplied by a five year period is the match amount to be contributed by the Yavapai Ranch.

BUDGET ANALYSIS Yavapai Ranch Drinker Project

ANTICIPATED COSTS:

PROJECT COMPONENT and COOPERATOR	COST-SHARE DOLLARS	GRANT DOLLARS REQUESTED
ARIZONA GAME AND FISH DEPARTMENT/HPC FUNDING <ul style="list-style-type: none"> Construction materials for project (five drinkers) <ul style="list-style-type: none"> ➤ Plumbing (valves, pipe, etc.) – 5 x \$200 ➤ Fiberglass Wildlife-friendly trough - 5 x \$1,000 ➤ 150' x 150' livestock exclusion pipe rail fence - 5 x \$4,000 Total =		\$ 1,000 \$ 5,000 \$ 20,000 \$ 26,000
ARIZONA GAME AND FISH DEPARTMENT REGION III and DEVELOPMENT BRANCH <ul style="list-style-type: none"> Personnel Services (Wildlife Manager III Salary) Vehicle Expenses 500 miles @ \$0.50/mile AGFD Development Branch labor, backhoe and vehicle costs for construction/installation. 	\$ 1,100 \$ 250 \$ 12,000	
YAVAPAI RANCH <ul style="list-style-type: none"> Maintain water delivery system. \$10/day x 365 x 5 = 	\$ 18,250	
TOTALS:	\$ 31,600	\$ 26,000

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

Arizona Game & Fish Department:

- Region III Wildlife Manager: provide project planning, coordination, implementation, construction oversight and project completion report.
- AGFD Development Branch: provide construction crew for project installation.

Prescott Habitat Partnership Committee:

- Publicly support project.

Yavapai Ranch:

- Allow use of existing water delivery system and maintain this system.
- Provide water through pipeline system.
- Assist with field coordination and access.

WOULD IMPLEMENTATION OF THIS PROJECT ASSIST IN PROVIDING, MAINTAINING, OR FACILITATING RECREATIONAL ACCESS?

YES[] NO[] N/AX

This project is strictly wildlife oriented. Although there will not be any increased benefit to livestock, it is clear that the Department has a strong relationship with the Yavapai Ranch due to their willingness to work with us on this project.

PROJECT MONITORING PLAN:

District Wildlife Manager and Ranch personnel will periodically visit the individual drinkers after the work has been completed and evaluate performance and determine if any maintenance is needed.

PROJECT MAINTENANCE:

Periodically clean trough and examine plumbing/float assembly.

PROJECT COMPLETION REPORT TO BE FILED BY:

District Wildlife Manager, Darren Tucker

WATER DEVELOPMENT PROJECTS (*see attached worksheet*):

ARIZONA GAME AND FISH DEPARTMENT **WATER DEVELOPMENT WORKSHEET**

PROJECT NAME: Yavapai Ranch Drinker Project

- 1) **Is the water development listed as a priority in the most recent “Wildlife Water Development Annual Implementation Schedule?”**
N/A
- 2) **Please list the Development Branch personnel and date coordinated with for this project.**
Joe Currie and Ed Jahrke were coordinated with multiple times during the months of July and August, 2012
- 3) **What is the estimated annual inches of precipitation for the area? (mark one)**
☐2-4 ☐4-6 ☐6-8 ☐8-10 ☒10-12 ☐12-14 ☐14-16 ☐ >16
- 4) **Is there a perennial water source available to big game within four miles of this project?**
YES ☐ (please complete #5 below) NOX (skip #5 below)
There are five drinkers proposed for construction within this project. Some of them are within four miles of each other. Other waters in the form of dirt stock tanks are also located in the general vicinity. The problem, however, is that none of them currently can be counted on to provide perennial water to wildlife.
- 5) **For the accessible, perennial water source nearest this project:**
Name of water source:
Type of water source (catchment, spring, dirt tank):
Ownership of water source:
Distance in miles from project:
- 6) **Is the target wildlife species a result of transplant efforts?** YES ☐ NOX
- 7) **Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument). If private land, list landowner.**
Private property owned by Yavapai Ranch (Owner - Fred Ruskin).
- 8) **Please provide the following information about access to the proposed site:**
Type of access (mark one): X2x4 vehicles ☐4x4 only ☐foot only**
**If foot access only: Distance in miles: _____ Approximate hiking time: _____

-- Does access to this site require crossing private or tribal lands? YESX NO ☐

-- Please describe any restrictions to public access: None
- 9) **Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.**
 - Fiberglass wildlife drinker with enclosed float assembly.
 - Black HDPE pipe to connect drinker to pipeline. 100' or less will be needed at each site.

- Miscellaneous fittings and a valve for each drinker.
- Standard steel livestock exclusion fencing with posts, rails and cement. Approximately 150' x 150'.

10) Was a site visit completed? YesX No[]

If Yes, please list personnel that attended and date: Darren Tucker and James Linson, Yavapai Ranch Manager, several times in past year.